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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,999	12/29/2000	Ali Najib Saleh	M-7165-1C US	8353
33031	7590	03/03/2006	EXAMINER	
CAMPBELL STEPHENSON ASCOLESE, LLP 4807 SPICEWOOD SPRINGS RD. BLDG. 4, SUITE 201 AUSTIN, TX 78759			NGUYEN, HANH N	
			ART UNIT	PAPER NUMBER
			2668	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/751,999

Applicant(s)

SALEH ET AL

Examiner

Hanh Nguyen

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 12/20/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-70, 111, 113-124, 126-137, 139-150, 152-163, 165-177, 179-191, 193-205 and 207-218 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
HANH NGUYEN  
PRIMARY EXAMINER

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/29/00; 9/16/03.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: IDS 1/9/04.

**Continuation of Disposition of Claims: Claims pending in the application are 38-70,111,113-124,126-137,139-150,152-163,165-177,179-191,193-205 and 207-218.**

***DETAILED ACTION***

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 38-70 are rejected under 35 USC 103(a) as being unpatentable over Iwata ( US pat. 5,687,168) in view of Spiegel et al. (US pat. 5,649,108).

In claim 38, Iwata discloses a networking protocol for a network comprising:  
a protocol packet (fig.7, step S103, transmitting a hello packet) sent from an origin node ( fig.1, first switch 11) to a target node (fig.1, fourth switch 14), the protocol packet ( the hello packet) is sent to neighbors ( fig.1, third switch 13) of the origin node to find the target node, and the protocol packet comprises information regarding a topology of at least a portion of said network ( hello packet is transmitted via each of ATM switches to recognize neighbor topology between one switch and its adjacent switch; see col.4, lines 5-25). Iwata does not disclose the protocol packet is configured to record a protocol packet path from the origin node to the target node.  
Spiegel et al. discloses a source node A transmits a setup packet ( protocol packet) to establishes a source route to target node G. The setup packet (the protocol packet) comprises a record route field 34 which is a list of nodes through which connection has already been established ( protocol packet is configured to record a protocol packet path from the origin node to destination node).  
See col.5, line 35 to col.6, line 5 & col.7, lines 20-25 7 col.10, lines 10-15. Therefore, it would

have been obvious to one ordinary skilled in the art to configure the record route feature of Spiegel et al. into the hello packet of Iwata in order to record links, nodes between the origin node and target node. The motivation is to setup network topology in network nodes as well as link status.

Claims 39-70 are rejected because they depend on their parent claim 38.

Claims 111, 113-124, 126-137, 139-150, 152-163, 165-177, 179-191, 193-205 and 207-218 are rejected under 35 USC 103(a) as being unpatentable over Fukushima et al. (Pat. 6,490,246 B2) in view of Spiegel et al. (US pat. 5,649,108).

In claims 111, 150, 163 and 205, Fukushima et al. discloses, in a description of Related art, col.1, lines 45-65, a method of processing a get link state advertisement packet ( a network comprising routers exchanging network link state information) comprising receiving the get link state advertisement packet (receiving a Hello packet) at a downstream node (a router), wherein the get link state advertisement packet ( the Hello packet) is sent by a sending node (from another router), the get link state advertisement packet comprises at least one node identifier ( Hello packet comprises router's ID), the at least one node identifier identifies a node in a network for which the sending node seeks a link state advertisement (the routers are aware of the link state information that is exchanged), and the downstream node and said sending node are nodes in the network (the two routers are connected to the same network) and sending at least one link state advertisement to said node ( see col.1, lines 45-65). Fukushima et al. does not disclose sending an acknowledgement to the downstream node.

Note: applicant does not specify whether the “sending an acknowledgement” is a positive or negative acknowledgement. Therefore, “a negative acknowledgement” as cited by Spiegel et al. below is considered an acknowledgement.

Spiegel et al. discloses sending an acknowledgement to the downstream node ( fig.4, step 50, setup packet is forwarded to a next node in the network. At step 51, if the connection is blocked as the connection setup packet is propagated through the network, a negative acknowledgement is transmitted from an adjacent downstream node to a source node; see col.7, lines; 20-35). Therefore, it would have been obvious to one ordinary skilled in the art to apply the transmission of acknowledgment of Spiegel et al. to the hello packet of Iwata in order to determine whether the packet have been received correctly. The motivation is to retransmit loss packet to target node.

Claims 113-123, 152-162, 165-176 and 207-218 are rejected because they depend on their parent claims.

In claims 124, 137, 177 and 191, as explained in the rejection of claims 111, 150, 163 and 205 by Fukushima et al., and based upon the missing features not explained by Fukushima et al., Spiegel et al. discloses a processor coupled to a computer readable medium ( fig.2, switch controller 12 coupled to node memory 17). Eventhough Fukushima et al., and Spiegel et al. do not disclose computer code encoded in the computer readable medium, but it is a well-known skill in the art to encode computer code such as software instructions in computer readable medium like the memory 17. Therefore, it would have been obvious to one ordinary skilled in the art to encode computer code such as program instructions, in memory 17 of Fukushima et al.

in order to configure network topology in a network nodes. The motivation is to determine the network connection as well as link connection statuses.

Claims 126-136, 139-149, 179-190 and 193-204 are rejected because they depend on their parent claims 124, 137, 177 and 191 respectively.

### ***Response to Arguments***

Applicant's arguments with respect to claims 38-70, 111, 113-124, 126-137, 139-150, 152-163, 165-177, 179-191, 193-205 and 207-218 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Callon et al. ( Pat. 5,251,205) and Mahany et al. (Pat.6,374,311 B1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on 571 272 3179. The fax phone number for the organization where this application or proceeding is assigned is 703-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen  
Primary Examiner



HANH NGUYEN  
PRIMARY EXAMINER